# **Nuclear Material Stabilization and Disposition**

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232-Z Decommissioning in Progress





Legacy Holdup Removal Activities

#### **OVERVIEW**

This section addresses work in Project Baseline Summary RL-0011, Nuclear Material Stabilization and Disposition.

NOTE: Unless otherwise noted, all information contained herein is as of the end of October 2003.

#### **NOTABLE ACCOMPLISHMENTS**

#### **Maintain Safe and Secure Special Nuclear Materials (SNM)**

The Plutonium Finishing Plant (PFP) successfully completed the transfer of SNM to International Atomic Energy Agency Vault 3, completing move four as planned.

One Interim Storage Cask was received from the Fast Flux Test Facility as planned.

#### **Stabilization of Nuclear Materials**

**Metals, Alloys, Oxides and Polycubes:** Outstanding progress was achieved in October. Eight hundred eleven chloride-oxide and oxide items, including mixed oxide materials, were stabilized. This progress represents one hundred forty-nine items ahead of the fiscal year (FY) 2004 Plan.

**Outer Can Packaging:** One hundred eleven 3013 containers were used in October to package the items stabilized. This represents a 22% improved packaging efficiency (i.e. increase in number of items per container) for the month. This is noteworthy because the improved packaging efficiency, if continued, will result in fewer 3013 containers with an equal reduction in the number of 9975 shipping containers needed for de-inventory.

### **Disposition of Nuclear Materials**

All activities under Fluor control for the initial shipment of SNM from PFP to the Savannah River Site (SRS) were completed on October 9, 2003. Further activities are awaiting RL/SRS decision. One hundred two pipe overpack containers were shipped, which is 171 less than planned for the year.

### **Disposition PFP Facility**

**Decontamination and Decommissioning (D&D) Crosscut:** The Fluor request for approval to zero-value buildings and fixed equipment at PFP was formally submitted to RL on October 31. The deactivation of non-operational and primarily low-value capital equipment and facilities provides the foundation to expedient and cost effective removal/disposal of PFP's facilities and equipment. Facility walk-downs were initiated to define performance incentive and end-point related work scope on a room-by-room basis. An additional 82 positions are being hired, in accordance with the baseline plan. The PFP Legacy Holdup Removal Plan was submitted to RL on June 30, 2003. A revised version was submitted for transmittal to the Washington State Department of Ecology (Ecology) on October 2, 2003.

**Transition 232-Z Facility:** Loose debris was removed from three subsections of the 232-Z glovebox. Large debris was size-reduced in the furnace section and then removed. This completes two of the six major activities required to complete glovebox process equipment removal. The second set of Ecology comments, received September 25, 2003, was incorporated into the 232-Z engineering evaluation/cost analysis. This will be transmitted to RL in preparation for the 30-day public comment period.

## **NOTABLE ACCOMPLISHMENTS, CONTINUED**

**Transition 234-5Z Facility:** The Nuclear Quality Assurance (Standard for the American Standards Institute/American Society of Mechanical Engineers Nuclear Power Plants) approved SA Robotics as a supplier. This will allow the inter-tent chamber size-reduction station modifications to proceed to meet the scheduled February 26, 2004, delivery date.

**Transition 241-Z Facility:** Ecology comments on the 241-Z Resource Conservation and Recovery Act of 1976 Closure Plan were received on October 22, 2003. PFP Decommissioning and Environmental organizations will work with RL and Ecology to resolve these comments to support issuance of a revised plan for public comment.

Final PFP Environmental comments on the 241-Z Washington State Department of Health (WDOH) Notice of Construction Draft Conditions and Limitations were transmitted to RL and WDOH on October 23, 2003, as planned.

#### **ISSUES**

**Shipment of the first 3013 container(s) to the SRS:** PFP management continues to work with the DOE (RL, HQ and SRS) to resolve issues and complete all activities needed to make the first shipment of material from PFP to SRS.

## FY 2004 FH FUNDS VS FORECAST (\$000)

	FY 2004 Anticipated Funding	FY 2004 Fiscal Year Spend Forecast	Variance	
<b>RL-0011</b> Nuclear Materials Stabiliation & Disposition	\$ 186,361	\$ 185,441	\$ 920	

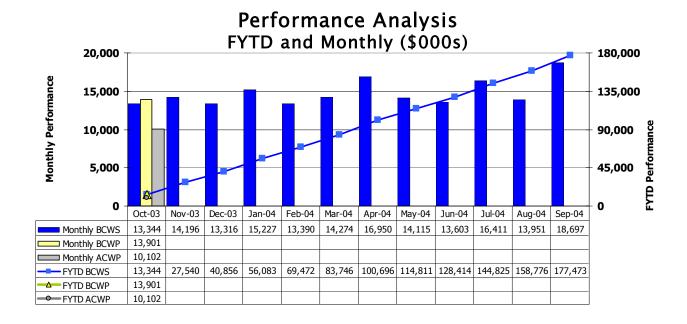
## FY 2004 SCHEDULE/COST PERFORMANCE (\$000)

		Budgeted Cost of Work Scheduled	Work	Actual Cost of Work Performed	Schedule	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0011	Nuclear Materials Stabiliation & Disposition	13,344	13,901	10,102	557	4%	3,799	27%	177,473

**NOTE**: Numbers are rounded to the nearest \$K.

**Schedule Variance (\$557K/4%):** Variance is within the threshold (+/- 10% or \$1M); therefore, no variance analysis is provided.

**Cost Variance (\$3,799K/27%):** The primary contributors to the favorable cost variance are significant increased stabilization and D&D progress in October with minimal corresponding costs (i.e., costs in FY 2003). Because ahead of schedule progress in FY 2003 could not be credited in FY 2003, a single year baseline, performance was credited in the first month of FY 2004. No corrective action is warranted as project performance is accurately reflected on a contract to date basis.



## **MILESTONE ACHIEVEMENT**

Number	Milestone Title	Туре	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-02-501	Complete Stabilization and Packaging of Polycubes	DNFSB	3/31/03	2/28/03		Complete
TRP-03-501	Submit Facility End Point Criteria Document to Ecology	TPA	9/30/03	9/30/03		Complete
TRP-03-503	Submit to Ecology a PFP Residual Chemical Hazards Assessment	TPA	12/31/02	12/27/02		Complete
TRP-03-504	Submit Closure Plan for 241-Z Waste Treatment Facility TSD Unit to Ecology	ТРА	7/31/03	7/25/03		Complete
TRP-04-506	Completion of all Pu Stabilization & Packaging	ΡI	2/18/04			On Schedule
TRP-04-508	Complete Repackaging of PFP Residues and Ship to CWC	ТРА	4/30/04			Repackaging is complete. Shipment to CWC will be impacted since request to lower the attractiveness level D was denied.
TRP-05-501	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA	6/30/05			On Schedule
TRP-05-503	Special Nuclear Material Transferred to Savannah River Site of DOE Approved Interim Storage	PI	9/30/05			Awaiting DOE Written direction to revise SNM De-Inventory
TRP-05-504	Legacy Pu Holdup Removed & Dispositioned	ΡI	9/30/05			On Schedule
TRP-06-501	Complete 100% of Legacy Pu Holdup Removal & Disposition	TPA	9/30/06			On Schedule
TRP-06-502	Complete Transition & Dismantlement of the 232-Z Bldg Incinerator	ТРА	9/30/06			On Schedule
TRP-06-503	Protected Area Eliminated	ΡI	12/31/05			On Schedule
TRP-06-507	PFP Facilities (61 Buildings) Ready For Demolition	ΡI	9/30/06			On Schedule